

Erythromycin resistant phenotypes in streptococcus isolates from laryngoscopes in Shahid Rajaei hospital, Qazvin (2013)

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*Abstract

Background: Macrolide-resistant streptococcus isolates may show constitutive or inducible resistance to clindamycin.

Objective: The aim of this study was to determine the frequency of erythromycin resistant phenotypes in streptococcus isolates from laryngoscopes in Shahid Rajaei hospital, Qazvin.

Methods: This descriptive study was conducted in streptococcus isolates from laryngoscopes in Shahid Rajaei hospital, 2013. The isolates were examined by Kirby Bauer disc diffusion method using erythromycin and clindamycin disks on Mueller-Hinton agar (according to Clinical and Laboratory Standards Institute standards). Inducible clindamycin resistance was tested by D-test in erythromycin resistant isolates. Data were analyzed using Chi-square test.

Findings: The phenotypes detected among the 23 isolates were as follows: one (4.35%) inducible clindamycin resistance (iMLSB), 6 (26.11%) constitutive clindamycin resistance (cMLSB), 5 (21.72%) MS phenotype and 11 (47.82%) wild type. The association between erythromycin and clindamycin resistance of the streptococcus isolates and D-test was not statistically significant.

Conclusion: With regards to the results, laryngoscope can potentially carry erythromycin and clindamycin resistant isolates. Therefore, infection control is necessary before using this instrument.

Keywords: Laryngoscopes, Erythromycin, Clindamycin, Drug Resistance

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